

Site Description:

The Ashland/Northern States Power Company (NSP) Lakefront Site is located in Ashland, Wisconsin. The site is bordered by US Highway 2 to the south, Prentice Avenue to the east, Ellis Avenue to the west, and Chequamegon Bay to the north. The properties on which contamination is located encompass approximately twelve acres and includes NSP (now known as Xcel Energy), Wisconsin Central Limited Railroad corridor, the City of Ashland's old waste water treatment plant/Kreher Park, and contaminated sediments in Chequamegon Bay (an inlet of Lake Superior). This location is mixed residential (the population is approximately 8,795) and recreational. Kreher Park includes a lakefront bicycle path. Along the eastern boundary of Kreher Park is a boat ramp, a public swimming beach, and a campground. Connected to the northwestern portion of Kreher Park is the Ashland marina. The filling of Chequamegon Bay after 1880 created much of the land that is the current site. Landfilling material included sawdust and other wood waste products from former lumber mills, as well as various demolition and fill material derived from a former manufactured gas plant (MGP) on Xcel Energy's current property.

Threats and Contaminants:

The landfill and former MGP activities are the likely primary cause of site contamination. The subsurface soil, groundwater, lake sediments and surface water are contaminated by varying concentrations of complex mixtures of organic chemicals known as polycyclic aromatic hydrocarbons (PAHs) and volatile organic compounds (VOCs). When PAHs are encountered in high concentrations, they are not very soluble in water and appear as coal tars and oils (commonly referred to as non-aqueous phase liquids, or NAPLs, some of which are heavier/denser than water, DNAPL, and some of which are lighter than water, LNAPL). People are not exposed to the contaminated soil because the contaminated soil is covered with clean fill.

Chequamegon Bay sediments pose a risk if agitated (wave action, boat anchoring, swimming, and wading) since the coal tars and LNAPLs are released into the water column and form "slicks" on the water surface. Warning signs and buoys are posted all around the contaminated area, which warns people against swimming, wading, and boating, and provides instructions for washing and flushing their skin and eyes. While the groundwater at the site is contaminated, the City of Ashland residents are not exposed to it because the municipal water supply is instead derived from Chequamegon Bay, outside the known extent of surface water contamination. However, some people do use water from wells near the contamination zone. These wells are not yet contaminated, but could become contaminated in the future. Fish sampling in Chequamegon Bay indicates that fish do not contain levels of site-related chemicals that are a health concern. However, people should continue to follow fish consumption advisories for Lake Superior.

Cleanup Progress:

Local officials notified the Wisconsin Department of Natural Resources (WDNR) of contamination found in excavations around the former wastewater treatment plant in the late 1980s. In 1993, WDNR began investigating the contamination found on city property. These investigations concluded that at least some of the contamination came from the former MGP that operated adjacent to the city's property. In 1995, WDNR notified NSP (now known as Xcel Energy), the City of Ashland, and the Wisconsin Central Limited Railroad that they are Potentially Responsible Parties (PRPs) for the contamination. WDNR and Xcel Energy have carried out various investigations on the properties. In 1999, a citizen's petition requested that the United States Environmental Protection Agency (US EPA) assess the site and determine if it could be listed on the Federal Superfund National Priorities List (NPL). Based on its hazard ranking score, US EPA proposed listing the site in December 2000. The site was added to the NPL in September 2002. US EPA issued an Administrative Order on Consent (AOC) to Xcel Energy on November 14, 2003 to complete the investigation, called a Superfund Remedial Investigation and Feasibility Study (RI/FS). Previous investigatory work will be utilized so that this effort will be greatly streamlined. Xcel Energy submitted a draft RI/FS Work Plan in August 2003, based on preliminary discussions with US EPA and WDNR concerning the AOC. Pre-AOC agreements regarding the location of new groundwater monitoring wells made it possible for Xcel Energy to begin installation of additional wells in December 2003. Xcel Energy will submit a revised RI/FS Work Plan to US EPA and WDNR in the winter of 2004. This work plan will provide for the additional work required to enable US EPA and WDNR to select the best overall cleanup plan for the site. Since the fall of 2000, however, Xcel Energy has been implementing an interim cleanup action which removes (pumps out) coal tar from the groundwater beneath its property, separates it from the water, and allows it to be transported off-site for proper disposal. In May 2002, Xcel Energy implemented a second interim response to eliminate a coal tar seep in Kreher Park.

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